

#### WASHINGTON STATE LEGISLATURE

# Office of the State Actuary

July 6, 2005

TO: Steve Nelsen, Executive Director

LEOFF Plan 2 Retirement Board

FROM: Marty McCaulay, Associate Actuary

CC: Matt Smith, State Actuary

SUBJECT: CHANGING THE 5-YEAR FAS PERIOD FOR LEOFF 2 RETIREMENT BENEFITS

### **Summary of Results**

As requested, we estimated the cost of decreasing the 5-year Final Average Salary (FAS) period for LEOFF 2 retirement benefits to 2 years or 3 years. We prepared estimates if the 2 or 3 year averaging period applied to all years of service, or if the current 5-year period applied to past service and the 2 or 3 year period applied to future service only. Details on the costs of decreasing the FAS are shown in Exhibit 1.

#### **Cost Summary**

FAS Period	Total Rate Increase	Total 2007-2009 Cost (millions, employer plus member)
2 Years - All Service	2.64%	\$66.2
3 Years - All Service	1.74%	\$43.6
2 Years - Future Service	1.28%	\$35.4
3 Years - Future Service	0.84%	\$23.4

#### **Members Impacted**

FAX: (360) 586-8135

TDD: 1-800-635-9993

This would impact the 14,754 active members and 521 terminated vested members, as well as new entrants. For a typical member making about \$69,000 per year retiring with 20 years of service, the retirement benefit would increase from \$25,300 per year using a 5-year average to \$26,400 using a 3-year average on all service and \$27,000 using a 2-year average on all service.

E-MAIL: actuary st@leg.wa.gov

### **Analysis of Results**

Decreasing the length of the averaging period to 2 years for all service would increase the liabilities for members not in pay status by \$320 million, an increase in liabilities of about 6.6%. This \$320 million increase in liabilities would be divided by the present value of future salaries for the active members. The payroll is about \$1 billion and the present value of future salaries is \$12.159 billion. The rate increase would be about \$320 million divided by \$12.159 billion, or 2.64%.

Decreasing the averaging period to 3 years for all service would increase the liabilities for members not in pay status by \$211 million, an increase in liabilities of about 4.4%. The rate increase would be about \$211 million divided by \$12.159 billion, or 1.74%.

Applying the benefit improvement to future service only would reduce the liability increase in half. Decreasing the averaging period to 2 years for future service would increase the liabilities for members not in pay status by \$155 million, an increase in liabilities of about 3.2%. The rate increase would be about \$155 million divided by \$12.159 billion, or 1.28%. Over 25 years, the 2-year average for future service would be more expensive than the 3-year average on all service, because it is more expensive for new entrants.

Decreasing the averaging period to 3 years for future service would increase the liabilities for members not in pay status by \$102 million, an increase in liabilities of about 2.1%. The rate increase would be about \$102 million divided by \$12.159 billion, or 0.84%.

Reducing the years in the averaging period from 5 years to 2 or 3 years would provide a larger benefit increase to members with higher pay increases prior to retirement, as illustrated in the following table. The percentage pay increases are typically higher earlier in the career, so in general, this would provide more of a benefit increase to members who terminate or retire after shorter periods of service. This plan change would also disproportionately favor members who experience above average pay increases (i.e., promotions, overtime, etc.) prior to retirement.

FAS Period	FAS as a percent of final pay assuming 4.5% annual pay increases	FAS as a percent of final pay assuming 7.0% annual pay increases
5 Years	92%	88%
3 Years	96%	94%
2 Years	98%	97%

#### **Assumptions and Methods**

The results are based on preliminary 2004 valuation data and the same actuarial assumptions and methods as disclosed in the 2003 Actuarial Valuation report. We did not change retirement rates or any other assumptions. Benefit improvements were applied for all future retirees, whether currently active or terminated vested. The costs shown would be higher if combined with other benefit improvements.

Exhibit 1 - Decrease FAS period

(Dollars in Millions)	FAS Period	Current	Increase	Total	
Actuarial Present Value of	2 Years - All Service	\$4,800	\$320	\$5,120	
Projected Benefits (The Value of the Total Commitment	3 Years - All Service	\$4,800	\$211	\$5,011	
to all Current Members)	2 Years - Future Service	\$4,800	\$155	\$4,955	
	3 Years - Future Service	\$4,800	\$102	\$4,902	
Unfunded Liability (PBO)	2 Years - All Service	(\$426)	\$165	(\$261)	
(The Value of the Total Commitment to all Current Members Attributable to Past Service)	3 Years - All Service	(\$426)	\$109	(\$317)	
	2 Years - Future Service	(\$426)	\$0	(\$426)	
	3 Years - Future Service	(\$426)	\$0	(\$426)	
Increase in Contribution Rates: *					
(Effective 09/01/2006)	FAS Period				
			2 Years	3 Years	
	2 Years	3 Years	Future	Future	
	All Service	All Service	Service	Service	
Current Members					
Employee	1.32%	0.87%	0.64%	0.42%	
Employer	0.79%	0.52%	0.38%	0.25%	
State	0.53%	0.35%	0.26%	0.17%	
Total - Current Members	2.64%	1.74%	1.28%	0.84%	
New Entrants**					
Employee	0.64%	0.42%	0.64%	0.42%	
Employer	0.38%	0.25%	0.38%	0.25%	
State	0.26%	0.17%	0.26%	0.17%	
Total - New Entrants	1.28%	0.84%	1.28%	0.84%	

<sup>\*</sup>For LEOFF 2, the employer pays 60% of the Employer State cost, the State pays 40%.

<sup>\*\*</sup>Rate change applied to future new entrant payroll and used for fiscal budget determinations only. A single supplemental rate increase, equal to the increase for current members, would apply initially for all members or employers.

## **Fiscal Budget Determinations:**

The proposal would result in higher contribution rates for all LEOFF 2 members and employers. As a result of the changes in the required contribution rates, the increase in funding expenditures is projected to be:

Costs (in Millions):	2 Year FAS All Service	3 Year FAS All Service	2 Year FAS Future Service	3 Year FAS Future Service
2006-2007				
State:				
General Fund	\$5.2	\$3.4	\$2.7	\$1.8
Non-General Fund	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>
Total State	\$5.2	\$3.4	\$2.7	\$1.8
Local Government	\$7.8	\$5.1	\$4.0	\$2.6
Total Employer	\$13.0	\$8.5	\$6.7	\$4.4
Total Employee	\$13.0	\$8.5	\$6.7	\$4.4
2007-2009				
State:				
General Fund	\$13.3	\$8.8	\$7.2	\$4.7
Non-General Fund	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>
Total State	\$13.3	\$8.8	\$7.2	\$4.7
Local Government	\$19.8	\$13.0	\$10.5	\$7.0
Total Employer	\$33.1	\$21.8	\$17.7	\$11.7
Total Employee	\$33.1	\$21.8	\$17.7	\$11.7
2006-2031				
State:				
General Fund	\$234.2	\$153.9	\$176.0	\$115.5
Non-General Fund	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>
Total State	\$234.2	\$153.9	\$176.0	\$115.5
Local Government	\$350.1	\$230.1	\$262.3	\$172.3
Total Employer	\$584.3	\$384.0	\$438.3	\$287.8
Total Employee	\$584.3	\$384.0	\$438.3	\$287.8